

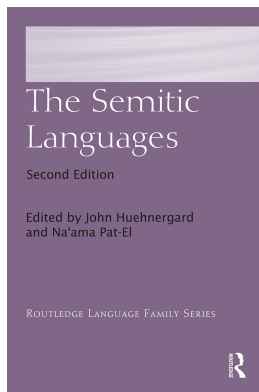
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John Huehnergard, Na'ama Pat-El

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Gene Gragg

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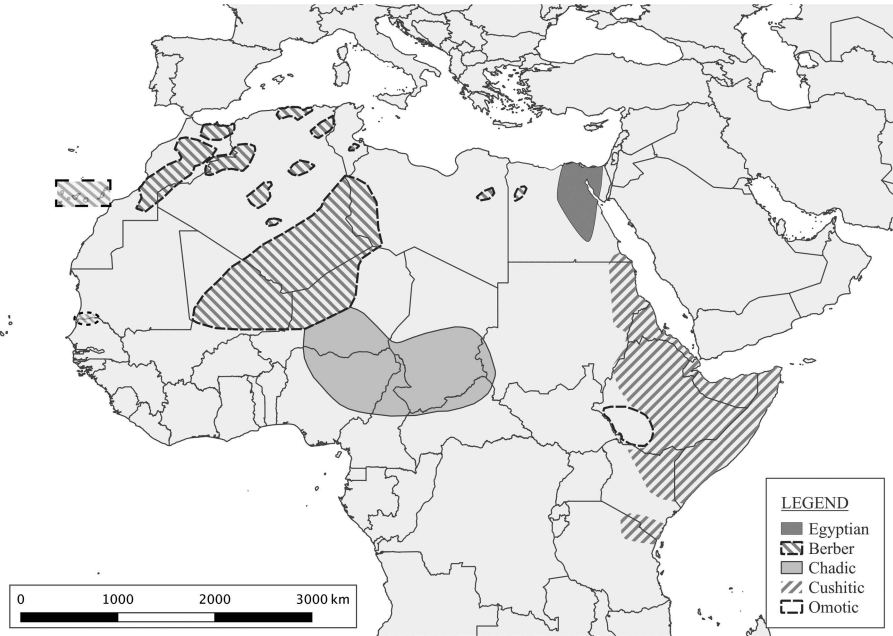
SEMITIC AND AFRO-ASIATIC

Gene Gragg

1 INTRODUCTION

By the mid-19th century, a number of scholars were already convinced that certain languages and language families of Africa, specifically Ancient Egyptian and Coptic, the Berber languages of North Africa, and newly discovered Cushitic languages in and around the Horn of Africa might be historically related as “sister languages” to Semitic (Lottner 1860). These languages were sometimes grouped together under the term “Hamitic,” which was extended by some authors to include Hausa and a number of related languages in the Lake Chad area (as well as, by others, to some highly unlikely candidates such as Bushman or Hottentot, included on the basis of ethnographic aprioris, or isolated or purely typological resemblances). In 1947, in an important synthesis of previous work and work done by himself and his colleagues through the 1930s, Marcel Cohen proposed 521 sets of what he considered to be plausible “Hamito-Semitic” lexical cognates, using the best available Semitic, Egyptian, Berber and Cushitic sources – and now including, if tentatively, more than 60 items from Hausa.

The scene for contemporary scholarship in this area was set by Joseph Greenberg and I. M. Diakonoff. In a series of articles in the 1950s, published as a single monograph in 1963, Greenberg, in the context of a project aimed at a “complete genetic classification of the languages of Africa” (p. 1), proposed grouping the languages of Africa into six super-families. Although there has been criticism of his method and some of his groupings, his position on Hamito-Semitic, which essentially confirms and continues that of Marcel Cohen, was widely accepted. Specifically Greenberg proposed: (a) that Hausa needs to be considered, not in isolation, but together with “the other languages in the [Lake Chad] area to which Hausa is clearly related” (p. 45; Greenberg lists 111 Chadic languages); (b) that “the language family traditionally named Hamito-Semitic has five *coordinate* branches: (1) Semitic, (2) Berber, (3) Ancient Egyptian, (4) Cushitic, (5) Chad” (p. 48; the traditional sub-family, western Cushitic, cited by Greenberg, is now widely, but not universally, considered to be a sixth coordinate branch, Omotic); (c) that in view of the outdated racial and ethnic connotations of the term Hamitic, and the fact that it “does not refer to any valid linguistic entity . . . I suggest the name Afroasiatic for this family as the only one found both in Africa and in Asia” (p. 50). Note that Greenberg used the term “Afroasiatic” in the first naming of the phylum, but that in the years thereafter would use alternatively “Afroasiatic” (Greenberg 1955) and “Afro-Asiatic” (Greenberg 1952, 1960). In this collection we have preferred the hyphenated form, both because it more closely parallels the most common usage for, e.g., “Indo-European,” and more explicitly underscores the geographical coverage of this widely extended super-family. Taking up, as it were, the challenge of this family, and more-or-less within the parameters proposed by Greenberg, Diakonoff proposed (1965, extensively revised in 1988) the first,



MAP 2.1 APPROXIMATE DISTRIBUTION OF AFRO-ASIATIC LANGUAGE FAMILIES (OTHER THAN SEMITIC)

and to date only real attempt at, a comprehensive comparative grammar of Afro-Asiatic (his “Afrasian”); in addition, with the help of the research group he formed in Leningrad/St. Petersburg, Diakonoff began the ongoing systematic collection of material for a “Historical Comparative Vocabulary of Afrasian” (Diakonoff et al. 1993: 97; cf. Orel and Stolbova 1995).

The remainder of the present overview will consist of the following: (a) a rapid geographic (see Map 2.1) and demographic survey of the non-Semitic families which have been identified as belonging to the Afro-Asiatic super-phylum; and (b) a brief discussion of what it might mean linguistically and historically to claim that Semitic is a member of this phylum.

2 THE AFRO-ASIATIC LANGUAGE PHYLUM

Describing a rough circle through the northern half of Africa, from west to east, and back again, the language families identified as Afro-Asiatic are Berber, Egyptian, Cushitic, Omotic and Chadic.

2.1 Berber

Berber is a set of closely related languages (older descriptive traditions even like to speak of *one* Berber language spread over many dialects) spoken in North Africa by perhaps

16 million persons in a kind of “discontinuous continuum” (Kossmann 2012: 18, who compares the differences among Berber languages to those of the Romance language family), i.e., an older continuum broken up by an overlay of now-majority Arabic since the invasions of the 7th century CE. To the north and east (naming explicitly only a few of the better known varieties), apart from an isolated small outlier community in southern coastal Mauritania (Zenaga), varieties of Berber spoken for the most part in village and small farming communities, stretch from southern Atlantic coastal Morocco (Tashelhiyt) and up the Atlas chain (Tamazight), over the Rif mountains and the Mediterranean coastal regions of northern Morocco (Tarifit) and Algeria (Kabyle), to the border near Tunisia (Tachawit) and to isolated oasis communities in Libya and Egypt. To the south, the other major group, varieties spoken by the traditionally nomadic Tuareg (Tamasheq, etc.), stretch across large areas of the southern Sahara from Mali to Niger, Algeria and Libya.

In addition to the living (or very recently extinct) varieties, there are two older attestations of a Berber, or Berber-related, variety. One is contained in more than a thousand short so-called Libyco-Berber inscriptions scattered across North Africa and as far as the Canary Islands. They are written in an indigenously developed script (tifnagh, a variety of which is still in use among certain Tuareg), and the oldest seem to date to the 2nd century BCE (Pichler 2007). The other variety is Guanche, a language of the Canary Islands, poorly documented, and extinct since the 17th century. Although Libyco-Berber and Guanche seem clearly related to Berber, not enough is known about them to say whether they are simply older representatives of the contemporary Berber continuum, or coordinate branches of a more complex Berber language family within Afro-Asiatic.

Earlier comparative Berber scholarship either tended to think of Berber as a single language to begin with (Basset 1952), or worked from a single, more conservative variety (for example, Tuareg, as in Prasse’s monumental 1972–74 work), but genuinely comparative studies are beginning to appear (Kossmann and Suchard 2018). Comparative lexical work has been started in Nait-Zerrad (1998).

2.2 Egyptian

Egyptian, the longest continuously attested language known, was spoken for more than four millennia in the Nile valley and delta from about 3000 BCE to 1300 CE. On the basis of its grammatical evolution it can be divided into two major periods (Loprieno and Müller 2012).

- 1 *Earlier Egyptian*: 3000–1300 BCE, characterized by complex suffix-based morphology and largely VSO word order. Subphases of this period are *Old Egyptian* (3000–2000 BCE – texts of the Old Kingdom and First Intermediate Period, e.g., “Pyramid Texts,” rock tomb “autobiographies”) and *Middle Egyptian* (2000–1300 BCE – Middle Kingdom to the end of Dynasty XVIII; the “Classical” stage of the language, for religious and literary purposes, Middle Egyptian, remained normative down into the Greco-Roman period).
- 2 *Later Egyptian*: 1300 BCE–1300 CE, Dynasty XIX to the Middle Ages where we see a gradual transition from “analytic” suffixal morphology to more “synthetic” prefixal and proclitic, with periphrastic indication of grammatical function and largely SVO syntax. The three subphases of this period are as follows: *Late Egyptian* (1300–700 BCE, Dynasty XIX literary texts and extensive Ramesside bureaucratic

archive), *Demotic* (700 BCE–400 CE, with a change of the writing system from hieratic to the even more cursive demotic, for writing administrative documents of pharaonic Late Period to Late Antiquity), *Coptic* (400–1300 CE, the written language of Christian Egypt, with biblical translations and liturgical and other texts written in a Greek-derived alphabet, using demotic characters for sounds not found in Greek).

As far as can be determined from the extant documentation, Egyptian at any given period seems to have been relatively uniform and without major dialectal differences. This remains true even in the Coptic period, where there are in fact recognized, but comparatively minor, dialect distinctions (Sahidic in Upper Egypt, Boharic in the delta, Fayyumic and Akhmimic in more restricted locations).

Utilization of Egyptian for comparative purposes is of course handicapped by a writing system which, until the adoption of the Coptic alphabet, had no representation for vowels, with the paradoxical (potentially circular) result that, apart from what can be gleaned by internal reconstruction and loan word phonology, the vocalic portions of potentially cognate lexemes, morphemes and paradigms have to be in large part themselves already the product of comparative reconstruction. That said, Egyptian was the first non-Semitic branch of Afro-Asiatic to be intensively studied by European scholarship, and, given its geographic proximity to and chronological overlaps with Semitic, as might be expected there is an abundant literature on comparisons and contacts between the two (cf. in general Schenkel 1990). Much less information is forthcoming from Egyptian interactions with their other neighbors: Nubian (clearly not Afro-Asiatic), Meroe (probably not), the Blemyes (most likely Cushitic Beja) and the Libyans (circumstantially Afro-Asiatic, but little linguistic evidence in the texts). There is also finally a large recent literature on morphological and syntactic developments within Egyptian (cf. the synthesis by Loprieno 1995), as well as on the internal lexical evolution leading to Coptic (Černý 1976). The place of Egyptian within Afro-Asiatic is discussed by, among others, Satzinger (1997, 2004), and an exhaustive, if not always universally accepted compilation of already proposed and new Egyptian etymologies is underway in Takács (1999–2008).

2.3 Cushitic

The 30-odd Cushitic languages are a very diverse group, which can be divided into four groups, partially on geographic, partially on linguistic criteria.

Proceeding from north to south, first come two relatively self-contained language/dialect groups:

Beja (Bedawiye, “North Cushitic”) is spoken by about 3,000,000 individuals belonging to various groups living in the Red Sea coastal plain and hills, between the Egyptian-Sudanese border and northern Eritrea. More or less significant differences have been observed in speech standards spoken by different tribes. The varieties about which information has made its way into the literature are, from north to south: the Bishari, south of Aswan; the Hadendiwa, Halenga, and Arteiga, in the vicinity of Suakin and Port Sudan; in northern Eritrea, the Beni Amir. It is not clear to what extent these varieties constitute genuinely distinct dialects.

Agaw (“Central Cushitic”) is a group of closely related languages spoken now by perhaps 500,000 individuals in isolated pockets on the Ethiopian plateau, and

supposedly forming the substrate of Ethiopian Semitic, introduced from southern Arabia, and developed in the area during the first millennium BCE. The principal Agaw languages are Bilin, western Eritrea around Keren; Xamta and Xamir, in the Wag and Lasta areas of Ethiopia; Quara (“Falasha”), Kemant and Kunfal toward the west; and Awnji, which represents the southern pocket of Agaw, in Agawmädər and Demot, north of the Blue Nile.

East Cushitic, further south, refers collectively to a succession of relatively coherent groups of languages stretching in a chain down from the Danakil depression on the Red Sea, down the Rift Valley into Kenya, spilling over to the east over the Horn of Africa, and in the west into southwest Ethiopia.

Saho-Afar – Two closely related languages spoken by about 2,000,000 people in adjoining areas of Djibouti, Eritrea and Ethiopia.

Omo-Tana – A large sub-family covering most of the Horn of Africa east of the Rift, from Djibouti, over eastern Ethiopia and Somalia and into northeast Kenya, east of Lake Turkana. The best-known language of this family is Somali, with perhaps 16,000,000 speakers in its several varieties.

Oromoid – A number of languages spoken originally around the Rift lakes in mid-Ethiopia, now with extension into Kenya. From the 15th century on, in one of the great population movements in African history, the Oromo moved out of this region to occupy much of southern and central Ethiopia, and made of Oromo, with more than 20,000,000 speakers, the language with one of the largest, if not the largest populations of native speakers in Ethiopia.

Highland – A cluster of five languages spoken by perhaps 5,000,000 people south and west of the Oromoid in the Rift lakes region.

Dullay – With Yaaku, now extinct, this is much less well-understood group of languages spoken in southwestern Ethiopia on either side of the Weyto River.

South Cushitic is, finally, southernmost extension of Cushitic, consisting of Dahalo, spoken in southern Kenya, plus several languages in the northern Tanzania Rift Valley. The most widespread of the latter, Iraqw, is spoken by nearly half a million people. The other half-dozen languages a spoken by smaller isolated (for the most part actual or former hunter-gatherer) populations surviving in the midst of more recent Nilotic and Bantu speech communities.

Collectively, these four branches (see Omotic for what was, and by some still is, considered to be a fifth “western”) are generally considered to constitute the Afro-Asiatic “Cushitic” node. The nature of this grammatically fairly uniform, if lexically quite diverse, node is of course subject to a fair amount of debate. Beja, in some respects the most archaic of the Cushitic languages, has sometimes been considered to be an independent Afro-Asiatic node in its own right, while Highland East Cushitic has been proposed as coordinate with, rather than subordinate to, the rest of East Cushitic (which in some accounts then becomes collectively Lowland East Cushitic); on the other hand, on the grounds of its morphology, South Cushitic is sometimes co-opted into East Cushitic (all of these options considered in Hetzron 1980; rejoinders in Zaborski 1997 and Appleyard 2004).

An excellent overview of Cushitic is available in Mous (2012). Lexical and grammatical reconstructions are now available for some Cushitic sub-families: Agaw (Appleyard

1987, 2006), Highland East Cushitic (G Hudson 1989), East Cushitic as a whole (Sasse 1979, 1980, 1982) and South Cushitic (Kiessling 2002, Kiessling and Mous 2003). While within Cushitic one finds grammatically the same striking similarities of pronominal and verbal inflection (with the notable shift from prefix- to suffix-conjugation) as one does in Afro-Asiatic as a whole, no real grammatical reconstruction has been attempted. And on the lexical level, in spite of separate branch reconstructions, reconstruction of Proto-Cushitic as a whole has been much more elusive. While there are clear lexical cognates shared by the various branches of Cushitic, it has proved especially hard to find “Proto-Cushitic” lexical items representing clear shared innovations in Cushitic, as opposed to being equally candidates for Proto-Afro-Asiatic. Orel and Stolbova in their Afro-Asiatic dictionary, wondering whether “Cushitic is an areal but not a genetic union, A Sprachbund of certain Hamito-Semitic dialects” (1995: x), present “Cushitic” material under the different branches separately; a similar view of Cushitic is suggested in Bender (1997: 25–7). In light of this, many “Proto-Cushitic” lexical reconstructions of Dolgopolsky (1973) and Ehret (1987) have not found widespread acceptance as such.

2.4 Omotic

The term Omotic is used for some two dozen still incompletely described languages in southwestern Ethiopia, for the most part along the Rift Valley lakes Abaya, Ch’amo, and Chew Bahir, in the watershed of the Omo River, which empties into Lake Turkana west of the Rift Valley. It is the branch about which we know the least, and whose status raises the greatest problems. For a long time referred to as “West Cushitic,” a series of studies in the 1960s convinced many investigators that Omotic is an independent branch of Afro-Asiatic, either coordinate with the other five, or a separate branching alongside the other five. A clear separation has been recognized between a southern branch (the so-called Aroid: Aari, Dime, Banna, Hamar, Karo), more influenced by long contact with neighboring Nilotic languages to the west in the same Omo watershed, and a better explored North Omotic (with the Omoto languages just west of the Rift lakes, and the long-known Yemsa [Janjero], Gimira, Shinasha, Mao and Kafa); it is still unclear whether the so-called Dizoid languages farther to the west should be more associated with North or South Omotic. Further hypotheses have split North and South Omotic into two distinct families, with either or both being denied Afro-Asiatic status.

We now have monograph-size overviews of Omotic lexicon and phonology (Bender 2000) and morphology (Bender 2002), and most researchers are in agreement about the unity of Omotic as a language family and its Afro-Asiatic status (cf. surveys of Hayward 2009 and Amha 2012, but note Theil 2012). In the present context, although Omotic data will provide little of direct relevance to Semitic, it can serve as an illustration of an extreme case for Afro-Asiatic differentiation.

2.5 Chadic

The Chadic language family, the largest and typologically most diverse of Afro-Asiatic, consists of between 140 and 160 languages, of which “only about 40 have been described, and most of these have been the subject of only one descriptive work” (Frajzyngier and Shay 2012: 242). Apart from the breakout Hausa, most Chadic languages are located in the southern part of the Chad Basin, in the sub-Saharan so-called Sudanian Savanna.

They are roughly situated in a Chadic rectangle, a space which they share with a number of other language families: from a point just south of Lake Chad, extend a line about 750 km to the west and 750 km to the east, and make a parallel line about 600 km to the south, yielding a rectangle extending from northeastern Nigeria, through the northernmost “panhandle” (“Far North Region”) of Cameroon, and into southwestern Chad. With the exception of Hausa, which has more than 20 million native speakers mainly in northern Nigeria and Niger, and is used as a second language by many more throughout west and central Africa, “only about eight languages have as many as 100,000 speakers,” and some fewer than 1,000 (Frajzyngier and Shay 2012: 237). The distribution of speakers of Chadic languages, as given in Simons and Fennig (2017), is approximately 4,360,000 native speakers in Nigeria (again, without Hausa), just under one million in Cameroon, and 1,434,000 in Chad.

As far as sub-classification is concerned, the three major branches of Chadic (Newman 1977, 1990) correlate roughly with geographical distribution. These are (using figures from Newman’s total of 146 explicitly named languages) as follows: a West Branch in eastern Nigeria (55 languages) which includes the Hausa homeland; a Central (“Biu-Mandara”) Branch spanning northwestern-most Nigeria and the northern Cameroon Mandara mountains (57 languages); and an East Branch (28 languages) in southwestern Chad. A smaller fourth branch, the Masa Branch, once classified with the Central Branch, has six languages in a corner of southwestern Chad near Cameroon.

Much historical work on Chadic has been accomplished; however without more descriptive work on the ground a reliable grammatical reconstruction of Proto-Chadic as such remains a task for the future. That said, this very large family has seemed amenable to lexical reconstruction, more so than, for example, Cushitic. A beginning of this work for the whole family was already sketched out in Newman and Ma (1966) and Newman (1977); a compilation of Chadic lexical roots was made by Jungraithmayr and Ibriszmow (1994), and a full-fledged etymological dictionary has been proposed by Stolbova (2016). An interesting historical-archeological perspective on the distribution of Chadic languages is provided by MacEachern (2017).

3 SOME AFRO-ASIATIC FEATURES IN SEMITIC

A systematic comparison of Semitic with a presumed “Proto-Afro-Asiatic” grammar and lexicon is obviously well beyond what is possible now, or perhaps ever. However, bracketing phonology and syntax, where areal and typological pressures abound on the one hand and much intermediate spadework remains to be done, there are in morphology a number of striking Semitic-Afro-Asiatic correspondences – which, moreover, have been consistently foregrounded in virtually all characterizations of “Hamitic/Afro-Asiatic,” going back to the time of Lottner and earlier. These are above all the patterns of person-number-gender marking in the pronominal, nominal and verbal morphology, coupled with evidence for a more-or-less pronounced root-and-pattern type marking of other grammatical distinctions particularly in the verbal morphology. There is also no lack of convincing lexical cognates, even if, for various reasons, the clear cases are relatively more limited and differences of opinion for the moment much greater.

3.1 Morphology

3.1.1 Pronominal sets

Although there is no real consensus on what the set of reconstructed “Proto-Afro-Asiatic” independent and affix pronouns might look like, an idea of the range and overlap of the relevant data can be gathered from a selection of the independent (col. 1) and affix (col. 2; usually direct object or possessive) pronouns from the major branches of each of the constituent families of Afro-Asiatic (Tables 2.1–2.3). Without trying to cover every detail, even in this sample we can detect the kind of patterns of interlocking systematic sound meaning correspondences that have always been considered to be at the core of any reliable proof of linguistic relatedness.

Globally, reading across persons, we note correspondences in the following.

First:

In Table 2.1 in Semitic there is a base *an-* for the 1SG independent pronoun alternating with suffix form consisting centrally of an *-i* vowel; for the 1PL there is a form involving *nV(h)n-*. This pattern is repeated in Egyptian and Berber; note also a suffixed *-k-* element in the singular in Akkadian, Egyptian and Berber (Berber proposed **ənakkw*, Appleyard 2003a: 25). Essentially the same 1SG/PL pattern then carries through for Cushitic, even in the case of Beja, which otherwise has refashioned the independent 2/3 pronouns on a base *bar-* with suffix persons. Note possibly also the *ni* in cols. 1, 2 of Hausa and 2 of Mubi.

Second singular:

In the 2nd person, a Semitic *an-t-* base finds echo in Cushitic *V(n)t-*, and perhaps in Egyptian *nt-* (but here, also as 3rd person base). The correlation of *V(n)t-* with a 2nd person suffix *-kV* in Semitic, Egyptian and Cushitic is probably the most notable interlocking sound meaning pattern in Afro-Asiatic. The *-k-* affix form is also present in Berber, Chadic and Cushitic, and has been incorporated into the independent form in Egyptian and Beja, and constitutes the independent form in Berber, South Cushitic and Chadic. The *-a ~ -i* MASC ~ FEM marker is also repeated across the phylum in the pronoun (but note the *-m* 2F marker in Berber, also present as general 2PL suffix in the verb subj agreement markers), and in the Beja verb subject agreement affixes (Table 2.5).

3rd person:

This is diverse, but a *-s-* element (varying with *-h-* in Semitic) predominates across the phylum. The *-t-* that appears in the feminine in Berber and Chadic reappears as *-t-* fem. in verb subject agreement and in the nominal gender system.

Plural:

In the plural, 1st person has a distinctive *n(Vn)* across the phylum, and rather than being distinctively plural, can almost be characterized as a fourth person. Note that Burunge (South Cushitic) has added some additional material (Kiessling 2002: 291, reconstructs an ancestral **ha:nti(ra)*). The real plurals are 2nd and 3rd person, where the personal marker, both independent and affix, tends to correlate with the *-nt/-k-* ~ *-s-* of the

TABLE 2.1 INDEPENDENT AND AFFIX PRONOUNS: SEMITIC, EGYPTIAN, BERBER

| PNG | AKKADIAN | | ARABIC | | MIDDLE EGYPTIAN | | COPTIC | | BERBER (TASHELHIT) | | BERBER (GHADAMES) | | |
|------|----------|---------|----------------|-----------|-----------------|---------------|-----------|--------|--------------------|----------|-------------------|-----------|---------|
| | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | |
| SG 1 | C | ana.ku | -i-~ja (-/nni) | ʔana | i-, -ni: | in-k | -i (wi) | ano-k | -i | nkki | -i | nǎʃf | -i |
| SG 2 | M | at-ta | -ka | ʔan-ta | -ka | nt-k | -k | nto-k | -k- | kiji | -k | ǰǰg | -ǰk |
| SG 2 | F | at-ti | -ki | ʔan-ti | -ki | nt-t | -t ~ -i | nto-Ø | -Ø- | kmmi | -m | ǰǰmm | -ǰm |
| SG 3 | M | ʃu: | -ʃu | hija | -hu | nt-ʃ | -ʃ (sw) | nto-ʃ | -ʃ- | ntta | -s | ntto | -ǰs |
| SG 3 | F | ʃi: | -ʃa | hahna | -ha: | nt-s | -s (sy) | nto-s | -s- | ntta-t | -s | ntttát | -ǰs |
| PL 1 | C | ni:nu: | -ni | nahnu | -na: | in-n | -n | ano-n | -n- | nkkwni | -nx | nǰkkǰmǰn | -nǰs |
| PL 2 | M | at-tunu | -kunu | ʔan-tum | -kum | nt-ʃn ~ nt-tn | -ʃn ~ -tn | nt-Øtn | -tn- | kwnni | -tn | ǰǰkwǰn | -wǰn |
| PL 2 | F | at-tina | -kina | ʔan-tunna | -kunna | nt-ʃn ~ nt-tn | -ʃn ~ -tn | nt-Øtn | -tn- | kwnnin-t | -tn | ǰǰkmatǰn | -ǰkmatǰ |
| PL 3 | M | ʃunu | -ʃunu | hum | -hum | nt-ʃn | -ʃn | nto-ou | -ou- | ntni | -sn | ǰǰmǰmǰn | -sǰn |
| PL 3 | F | ʃna | -ʃna | humna | -humna | nt-ʃn | -ʃn | nto-ou | -ou- | nttn-ti | -sn-t | ǰǰntnatǰn | -ǰsntǰ |

TABLE 2.3 INDEPENDENT AND AFFIX PRONOUNS: OMOTIC AND CHADIC

| PNG | YEMSA (NORTH OMOTIC) | | AARI (SOUTH OMOTIC) | | HAUSA (WEST CHADIC) | | HDI (CENTRAL CHADIC) | | MUBI (EAST CHADIC) | |
|--------|-------------------------|---------|------------------------|--------------|------------------------|-----|-------------------------|------------|-----------------------|-------|
| | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| | SG 1 C | tá | -ná ~ -tà- | ʔitá | ʔi(m) | ni: | ni | íí | i (iju) | ndé |
| SG 2 M | né | -né- | <u>a</u> :ná | <u>á</u> (m) | kai | ka | ká (yá) | yá (ká) | kám | ká |
| SG 2 F | | | | | ke: | ki | | | kin | ki |
| SG 3 M | bár | -bá- | nó(ə) | ki(m) | fí: | fí | tsátsí | Ø, n (tsi) | ár | à |
| SG 3 F | bàr | -bà- | ná(ə) | kó(m) | íta | ta | | | tír | dì |
| PL 1 C | innò | -ni- | wə(ə)tá | wó(m) | mu: | mu | ámú-áɣní | mú-ɣní | áná-éné | á |
| PL 2 C | nittò | -niti- | jetá | yé(m) | ku: | ku | káyúni | kúni | kéné | ká(n) |
| PL 3 C | bassó | -bessi- | ketá | ké(m) | su: | su | xáxən | xən | kér | kà |

Notes: Aari (Hayward 1990: 448, 451): Independent vs. object pronoun (with -m), subject (without -m) [underlined vowels are with breathy voice; IPA = double underdot]. Cf. Bender (2000: 163).

Hausa (Newman 2000: 476, 487): Independent non-subject vs. Strong object (p. 486, weak subject – combines with TAM).

Hdi (Frajzyngier 2002: 83, 124, 135).

Mubi (Jungrauthmayr 2013: 55): Preposed subject Independent (ipl = inc~ex) vs. preposed subject/object.

respective singulars, and where the plurality is marked, across the phylum, by *-n* (secondarily by *-u*, especially in Chadic).

In all of this, Omotic is the outlier. Some correlation can possibly be made in the plural forms of North Omotic, but the singular is a classic puzzle. The anomaly of 1~2 *t(a)~(ne)*, instead of roughly the other way around, has been noted by researchers in this domain for nearly a century, and constitutes one of the bases for separating Omotic from Cushitic in the first place. Hayward (2009: 89, 91) does show a reasonable path from something like Afro-Asiatic **(a)n- ~ *ta* to the attested forms, but much more context would have to be given. South Omotic is even more problematic, and it has been suggested that some or all pronominal forms are Nilotic in origin, pushing off some more definitive judgment on this matter into a future where both language families will be much better known and evaluable.

3.1.2 Verbal morphology: subject-agreement affixes

Clearly related to the pronominal system are the special systems for marking subjects of verbs in some or all tense–aspect–mood (TAM) configurations.

Some of the systems are somewhat removed from what we find in Semitic. Perhaps the simplest system is presented by the Egyptian nonstative conjugations in which a pronominal subject, *required only when a nominal subject is not present*, is indicated by a suffix pronoun (the Egyptian column 2 in Table 2.1) attached to a simple, geminated or augmented stem – the vocalism of which is of course not apparent in the Egyptian writing system. Thus, 3MS forms with *f* are: *sḏm-f* ‘he hears’, *sḏm-n-f* ‘he heard’, *sḏm-jn-f* ‘(then) he heard’. In Chadic, typically a pronominal form, preceding or following the verb, serves as a base for clitics and/or tone pattern indicating TAM categories. Many patterns exist, but cf. Hausa verb forms with 2MS *ka*: *ka: zo*: ‘you came’, *ka zo*: ‘(that) you came’,

kà zo: ‘come!’, *kàna:’ zo*: ‘you are coming’. Finally, Omotic verbal inflection usually involves affixing or cliticizing combinations of pronominal elements and TAM markers. The basic patterns globally resemble those of the Cushitic suffix conjugations, but cannot be reduced to them. An analysis would take us too far from Semitic, but, to get an idea, compare the paradigms of the Yemsa suffixing perfect in Table 2.4, present progressive, and future of the verb *am* ‘go’:

TABLE 2.4 TENSE/PNG INFLECTION IN YEMSA (OMOTIC)

| PNG | | | PERFECT | PRESPROGRESSIVE | FUTURE |
|-----|---|---|----------------|------------------|--------------------------|
| SG | 1 | C | <i>am-í-n</i> | <i>am-difän</i> | <i>am-a-ná</i> |
| | 2 | C | <i>am-í-t</i> | <i>am-difát</i> | <i>am-a-tà</i> |
| | 3 | M | <i>am-í</i> | <i>am-difé</i> | <i>am-a-ná</i> |
| PL | | F | <i>am-i</i> | <i>am-difä</i> | <i>am-a-ná</i> |
| | 1 | C | <i>am-nì</i> | <i>am-difeni</i> | <i>am-a-nì</i> |
| | 2 | C | <i>am-tí</i> | <i>am-difetí</i> | <i>am-a-tí ~ am-o-tí</i> |
| | 3 | C | <i>am-seté</i> | <i>am-difé</i> | <i>am-soné</i> |

By way of contrast, for Semitic, Berber and Cushitic, as well as (partially) Egyptian, there are two patterns of subject agreement showing not only the kind of interlocking form-meaning homology that implies relatedness, but also potentially some conceivable sub-branching configuration within Afro-Asiatic.

3.1.2.1 The “stative” conjugation

A distinct “stative” conjugation has long been recognized in Akkadian, Egyptian and Berber, and its existence of such a distinct conjugation has been more recently pointed out in Cushitic (Banti 1987). Functionally the stative covers a lot of ground in each family, but a common “expression of state/result” can be taken as one aspect of its semantic core, which can branch out into expressions of completion, action in the past, etc. As is explained in Chapter 3, §3.5.4, the suffix, mainly past-tense, conjugations of West Semitic have been historically linked by some to a Proto-Semitic, Akkadian-like stative conjugation.

The first two columns of Table 2.5 indicate the morphological make-up of this conjugation in Akkadian and Egyptian – basically some adjectival/participial form of the verb (the details of this are obviously hidden in Egyptian by the vowel-less hieroglyphic writing system) to which is suffixed/cliticized what might be plausibly considered a reduced form of the independent pronoun, without the *-an/-nt-* base, and with suffixed *-a:-*, at least in Akkadian (see Table 2.1). The other two families, however, show significant differences in the morphology of this grammatical category.

Thus the Berber stative *is* quite distinctive within Berber verbal morphology. In the first place, it involves exclusively suffixing, as opposed to the primarily prefixing nature of finite verb morphology, outside of the imperative, in Berber. The 2/3SG morphology lines up, to an extent, with Semitic and Egyptian, but it is difficult to link plausibly the 1SG *-āš* (< *Vγ), which is also the 1SG affix in the “prefixing” conjugation, on the basis of

TABLE 2.5 STATIVE CONJUGATION PERSON MARKERS

| PNG | | | AKKADIAN | EGYPTIAN | BERBER | AFAR |
|-----|---|---|--------------------|------------------|------------------|---------------------|
| SG | 1 | C | <i>pars-a:ku</i> | <i>sḡm-kw</i> | <i>māttit-āš</i> | <i>miš-ijo-h</i> |
| | | M | <i>pars-a:ta</i> | | | |
| | 2 | F | <i>pars-a:ti</i> | <i>sḡm-tj</i> | <i>māttit-ət</i> | <i>miš-ito-h</i> |
| | | M | <i>paris</i> | <i>sḡm-w</i> | <i>māttit</i> | <i>meš-e-h</i> |
| | 3 | F | <i>pars-at</i> | <i>sḡm-tj</i> | <i>māttit-ūt</i> | <i>meš-e-h</i> |
| | | C | <i>pars-a:nu</i> | <i>sḡm-wjn</i> | | <i>miš-ino-h</i> |
| PL | 1 | M | <i>pars-a:tunu</i> | | | |
| | | F | <i>pars-a:tina</i> | <i>sḡm-tjwnj</i> | <i>māttit-it</i> | <i>miš-ito:nu-h</i> |
| | 2 | M | <i>pars-u:</i> | | | |
| | | F | <i>pars-a:</i> | <i>sḡm-wj</i> | | <i>moš-o:nu-h</i> |
| | 3 | M | | | | |
| | | F | | | | |

present knowledge, with the Akkadian and Egyptian *-ku-*; the 1/2/3PL suffix *-it* is without parallel in Berber pronominal (or nominal) morphology. The Afar stative, which does happen to occur only as a suffix conjugation, lines up more with Cushitic subordinate/relative clause morphology (cf. however the arguments in Banti 2004, who argues for a connection). Nevertheless, this striking Akkadian-Egyptian grammatical homology, which was noted very early in the comparative study of the two languages, has been claimed as one of the arguments for an especially close historical relation between Semitic and Egyptian.

3.1.2.2 The prefix conjugation

But a more remarkable morphological homology is found in the so-called prefix conjugation, which involves Semitic, Berber and Cushitic (Table 2.6). In this system, the verb takes a prefix indicating primarily person, secondarily gender and a suffix marking primarily number, secondarily gender (in Berber 1SG is marked uniquely by a suffix *-āš-āy-āk* etc.), and 2SG usually has suffix *-Vt/* in addition to the */t-/* prefix). The prefix and suffix material clearly reflects shapes found in some, perhaps oldest/most archaic, independent pronoun systems.

Although clearly cognate, this way of marking subject is distributed differently, morphologically and lexically, in the three families, Semitic, Berber and Cushitic, where it is found. In Akkadian and Berber it is the subject agreement mechanism in all TAM configurations except for a suffixing stative (see §3.1.2.1). In the rest of Semitic it is used for non-past and modal tenses, as opposed to a primarily past tense suffixing PNG marker system (which may or may not be derived from the stative; Chapter 3, §3.5.4). In all branches with prefix-conjugated verbs, all non-PNG TAM distinctions are made by stems with ablauting (root-and-pattern) vowel and syllabicity patterns.

In Cushitic, on the contrary, where the prefix conjugation is found, the distinction is lexical – a verbal lexeme, in all its TAM configurations, is conjugated either according to the prefix pattern or according to the suffix pattern. It is obvious that the prefix conjugation is an older pattern that is in the process of being replaced. It is holding its own in Beja, perhaps the most conservative branch of Cushitic, and in the Saho-After group of East Cushitic, with several hundred verbal lexemes conjugated according to this pattern in each language. Small numbers (from 1 to 12) of prefix-conjugated verbs are present

TABLE 2.6 PREFIX CONJUGATION: PERSON MARKERS/STEMS

| | 'DIVIDE' AKKADIAN | | 'ROAST' BERBER | | 'COLLECT' BEJA (PREFIX CONJUGATION) | | | 'EAT' BEJA (SUFFIX CONJUGATION) | | |
|--------|----------------------|---------------------|--------------------|----------------------|----------------------------------------|------------------------------|---------------------------------|------------------------------------|------------------------------|---------------------------------|
| | PRETERITE | PRESENT | AORIST | IMPERFECTIVE | "OLD PAST" (> AORIST) | "OLD PRESENT" (> PAST) | "NEW PRESENT" (> PRESENT) | "OLD PAST" (> AORIST) | "OLD PRESENT" (> PAST) | "NEW PRESENT" (> PRESENT) |
| SG 1 C | <i>a-prus</i> | <i>a-parras</i> | <i>ǎknǎf-ǎš</i> | <i>ǎkǎnnǎf-ǎš</i> | <i>ʔ-i:-dbil</i> | <i>ʔ-a-dbil</i> | <i>ʔ-a-dambi:l</i> | <i>tam-i</i> | <i>tam-án</i> | <i>tam-á-n-i</i> |
| SG 2 M | <i>ta-prus-i</i> | <i>ta-parras</i> | <i>t-ǎknǎf-ǎt</i> | <i>t-ǎkǎnnǎf-ǎt</i> | <i>t-i:-dbil-a</i> | <i>t-i-dbil-a</i> | <i>dambi:l-a</i> | <i>tam-t-i:-a</i> | <i>tam-t-á:</i> | <i>tam-ti-n-ij-a</i> |
| SG 2 F | <i>ta-prus-i:</i> | <i>ta-parras-i:</i> | | | <i>t-i:-dbil-i</i> | <i>t-i-dbil-i</i> | <i>dambi:l-i</i> | <i>tam-t-i:</i> | <i>tam-t-á:-ji</i> | <i>tam-ti-n-i:</i> |
| SG 3 M | <i>i-prus</i> | <i>i-parras</i> | <i>j-ǎknǎf</i> | <i>j-ǎkǎnnǎf</i> | <i>ʔ-i:-dbil</i> | <i>ʔ-i-dbil</i> | <i>dambi:l</i> | <i>tám-i</i> | <i>tam-ij-a</i> | <i>tam-ti-n-i</i> |
| SG 3 F | <i>ta-prus</i> | <i>ta-parras</i> | <i>t-ǎknǎf</i> | <i>t-ǎkǎnnǎf</i> | <i>t-i:-dbil</i> | <i>t-i-dbil</i> | <i>dambi:l</i> | <i>tam-t-i:</i> | <i>tam-t-á</i> | <i>tam-ti-n-i</i> |
| PL 1 C | <i>ni-prus</i> | <i>ni-parras</i> | <i>n-ǎknǎf</i> | <i>n-ǎkǎnnǎf</i> | <i>n-i:-dbil</i> | <i>n-i-dbil</i> | <i>n-e:-dbil</i> | <i>tám-n-i</i> | <i>tám-n-a</i> | <i>tám-n-aj</i> |
| PL 2 M | <i>ta-prus-a:</i> | <i>a-parras</i> | <i>t-ǎknǎf-ǎm</i> | <i>t-ǎkǎnnǎf-ǎm</i> | <i>t-i:-dbil-na</i> | <i>t-i-dbil-na</i> | <i>t-e:-dbil-na</i> | <i>tám-t-i:-na</i> | <i>tám-t-a:-na</i> | <i>tám-t-e:-na</i> |
| PL 2 F | <i>ta-prus-a:</i> | <i>ta-parras</i> | <i>t-ǎknǎf-nǎt</i> | <i>t-ǎkǎnnǎf-nǎt</i> | | | | | | |
| PL 3 M | <i>i-prus-u:</i> | <i>ta-parras-i:</i> | <i>ǎknǎf-ǎn</i> | <i>ǎkǎnnǎf-ǎn</i> | <i>ʔ-i:-dbil</i> | <i>ʔ-i-dbil-na</i> | <i>ʔ-e:-dbil-na</i> | <i>tám-i:-n</i> | <i>tam-ij-a:-n</i> | <i>tám-e:-n</i> |
| PL 3 F | <i>i-prus-a:</i> | <i>i-parras</i> | <i>ǎknǎf-nǎt</i> | <i>ǎkǎnnǎf-nǎt</i> | | | | | | |

Note: Beja stress as in Wedekind et al. (2007).

TABLE 2.7 SUFFIX CONJUGATION: AFAR

| PNG | | | 'OPEN' AFAR | |
|-----|---|---|-------------------|-------------------|
| | | | PERFECTIVE | IMPERFECTIVE |
| SG | 1 | C | <i>fak-Ø-e</i> | <i>fak-Ø-a</i> |
| SG | 2 | C | <i>fak-t-e</i> | <i>fak-t-a</i> |
| SG | 3 | M | <i>fak-Ø-e</i> | <i>fak-Ø-a</i> |
| SG | 3 | F | <i>fak-t-e</i> | <i>fak-t-a</i> |
| PL | 1 | C | <i>fak-n-e</i> | <i>fak-n-a</i> |
| PL | 2 | C | <i>fak-t-e:ni</i> | <i>fak-t-a:na</i> |
| PL | 3 | C | <i>fak-Ø-e:ni</i> | <i>fak-Ø-a:na</i> |

in about eight other Cushitic languages, but in all the other Cushitic languages the prefix conjugation has been completely replaced by the suffix conjugation pattern. However, as was realized almost from the beginning of the systematic study of Beja in the 19th century, the Cushitic suffix conjugation, as opposed to suffix conjugation patterns that arose in the rest of Afro-Asiatic, is almost certainly simply an encliticized/suffixed prefix-conjugated verb, reduced to a single ablauting vowel (transparently in Beja, compare the prefix and conjugation forms in Table 2.6, and nearly so in East Cushitic, Table 2.7). Thus, on this analysis, the Cushitic suffix conjugation is a transformation of, rather than a replacement of, the prefix conjugation.

Since this highly specific pattern is attested only in Cushitic, Semitic and Berber, we must wonder whether it represents a preserved archaism, lost in the other branches of Afro-Asiatic (highly unlikely for Omotic and Chadic, and there is no evidence whether or not it ever existed in Egyptian), or is on the contrary a shared innovation – which would be a strong indication that these three families had a common linguistic history, and thus might constitute a sub-branch within Afro-Asiatic.

An important fact shown about Cushitic, and by extension perhaps about subdivision in Afro-Asiatic generally, is that, as shown in Table 2.6, Beja seems to have undergone an independent transformation of its prefix-conjugation tense system, whereby a new present (involving prefixed/infixes *-n-* in the singular and *-ee-* in the plural) was created, and, in what Zaborski (1975) calls a “push chain,” the old present became a past, while the old past took on a new “Aorist” past-tense function. This seems to show that the “Cushitic” suffix conjugation, generally recognized as being the defining shared morphological innovation for Cushitic (Tosco 2000, Appleyard 2004) would not have existed as such in a “Proto-Cushitic,” but might have spread as an inflectional pattern among languages which would have already gone separate ways in the development of the inherited prefix conjugation patterns.

3.1.3 Verbal morphology: tense–aspect–mood stem formation

A long-remarked similarity among the languages identified as Afro-Asiatic is the phenomenon referred to as “root-pattern” morphology. Although it exists (and sometimes abundantly so) in the nominal morphology, it is particularly notable as “spell-out” of TAM categories in the verbal stems where whole PNG affixes are supplied by the pronominal material displayed in Tables 2.1, 2.3, 2.5 and 2.6.

Whatever might have been the case in Ancient Egyptian is obviously obscured by the writing system. That such stem/root-class correlations existed however may be inferred from the fact that, even though the differences are manifested in the text only indirectly and sporadically (presence/absence of gemination, writing of a glide, etc.), in order to account for variations in stem formation in the Egyptian verb (infinitive, imperative, stative, perfect, etc.) recourse is had traditionally to a Semitic-like root-class system: biliteral (C_1C_2), 2nd-geminate ($C_1C_2C_2$), trilateral ($C_1C_2C_3$), trilateral – weak (C_1C_2w/y), trilateral – geminate ($C_1C_2C_3C_3$), quadrilateral ($C_1C_2C_3C_4$), quadrilateral – weak ($C_1C_2C_3w/y$), quinqueliteral ($C_1C_2C_3C_2C_3 / C_1C_2yC_2y$). This kind of correlation can be inferred perhaps also from the regular ablaut pattern which surfaces in Coptic between the “infinitive,” the base for most finite verb forms, and the so-called qualitative (*kôt/kêt* ‘build’, *mise/mose* ‘give birth’, *pôht/paht* ‘bend’; and cf. Reintges 1994).

Once more, however, as was the case for subject-agreement patterns, the most intricate cases come from Semitic, Berber and Cushitic, as displayed in Tables 2.8, 2.9 and 2.10.

Table 2.8 shows a typical distribution of stems and root-forms in Akkadian (the stems limited here for purposes of illustration to the preterite, present and perfect). The stem forms are correlated with a root-class schematized as a three-segment sequence. It provides

TABLE 2.8 ROOT CLASS/STEM: AKKADIAN (FORMS ARE 3MSG)

| STEM | SUFFIX | ROOT CLASS | | | | | | | | |
|-----------|--------|-----------------|-----------------|------------------|----------------|-----------------|----------------|----------------|----------------|----------------|
| | | ‘DIVIDE’ CCC | ‘SEIZE’ ACC | ‘DESCEND’ wCC | ‘EXIST’ CuC | ‘BESTOW’ CrC | ‘ASK’ CAC | ‘FILL’ CCA | ‘BUILD’ CCl | ‘COUNT’ CCU |
| Preterite | - Ø | <i>iprus-</i> | <i>i:xuz-</i> | <i>urid-</i> | <i>iku:n-</i> | <i>iqi:f-</i> | <i>ifa:l-</i> | <i>imla</i> | <i>ibni</i> | <i>imnu</i> |
| | - V | | | | | | <i>imlV̂</i> | <i>ibnV̂</i> | <i>imnV̂</i> | |
| Present | - Ø | <i>iparras-</i> | <i>ixxaz-</i> | <i>urrad-</i> | <i>ika:n</i> | <i>iqi:af</i> | <i>ifa:l</i> | <i>imalla</i> | <i>ibanni</i> | <i>imannu</i> |
| | - V | | | | <i>ikunnV</i> | <i>iqiffV</i> | <i>ifallV</i> | <i>imallV̂</i> | <i>ibannV̂</i> | <i>imannV̂</i> |
| Perfect | - Ø | <i>iptaras-</i> | <i>i:taxaz-</i> | <i>ittarad-</i> | <i>iktu:n-</i> | <i>iqti:f-</i> | <i>ifta:l-</i> | <i>imtala</i> | <i>ibtani</i> | <i>imtanu</i> |
| | - V | | | | | | <i>imtalV̂</i> | <i>ibtanV̂</i> | <i>imtanV̂</i> | |

TABLE 2.9 ROOT CLASS/STEM: BERBER

| STEM | ROOT CLASS | | | | |
|-------------------|------------------|-----------------|-----------------|-------------------------------|-----------------|
| | ‘ROAST’ vCCvC | ‘ENTER’ VCvC | ‘THROW’ vCvC | ‘GRILL’ vC ₂ vC | ‘FELL’ vCCvC |
| Aorist | <i>âknâf</i> | <i>atâf</i> | <i>âğər</i> | <i>âddâb</i> | <i>âşruw</i> |
| Perfective | <i>âknâf</i> | <i>utâf</i> | <i>âğâr</i> | <i>âddâb</i> | <i>âşraw</i> |
| Imperfective | <i>âkannâf</i> | <i>âtâtâf</i> | <i>âğğâr</i> | <i>âtâddâb</i> | <i>âşârraw</i> |
| Neg. perfective | <i>âknêf</i> | <i>utêf</i> | <i>âğêr</i> | <i>âddeb</i> | – |
| Neg. imperfective | <i>âkannêf</i> | <i>âtîtêf</i> | <i>âğğêr</i> | <i>âtâddeb</i> | – |

Notes: Ghadames, “First apophonic class”; Kossmann (2013: 64). Forms are those of the stem minus person markings. The root classes are based on form of aorist: v = “central vowel” *â, æ*; V = “plain vowel” *i, e, a, o, u*. This is one of five apophonic classes, each with numerous subclasses – plus set of irregular verbs.

TABLE 2.10 ROOT CLASS/STEM: CUSHITIC BEJA

| STEM | ROOT CLASS | | |
|------------|------------------|---------------------|---------------|
| | 'COLLECT' CCC | 'BRING BACK' CCV | 'BURY' CVC |
| Past | -dbil- | -dgi- | -bis- |
| Aorist | -i:-dbil- | -di:g- | -i:-bis- |
| Modal | -i:-dbil- | -da:g- | -i:-bis- |
| Present sg | -da-n-bi:l- | -da-n-gi- | -n-bi:s- |
| Present pl | -e:-dbil- | -de:g- | -e:-bis- |
| Negative | -dabi:l- | -dagi- | -bi:s- |

in the “ideal” CCC case a complete consonantal skeleton for a completely vocalic “filler” pattern; in the other root classes one (or possibly more) of the consonantal “slots” is taken by a vowel or semi-vowel, and the pattern works itself out via some more-or-less predictable/systematic morphophonemic processes. In Akkadian, and elsewhere, some of the vocalic root segments are clearly cognate to laryngeal or semi-vocalic root segments in other Semitic languages, but Semitic scholars (and speakers?) have tended to project stems historically backwards or teleiotically forward, onto an ideal tri-consonantal root (with four or even five consonant extensions allowed for).

As can be seen from Tables 2.9 and 2.10, the same kind of stem root-shape correlation occurs in Berber and Beja, but less clearly tri-consonantal or even tri-segmental than in Semitic. It remains to be determined whether Semitic represents a starting point, a culmination or just one possible “solution” in the development of root-stem correlations, but the drive toward some kind of correlation can clearly be taken as a genetic trait these three families hold in common (Gragg 2006).

A more restricted kind of root-pattern verbal morphology exists also in Chadic, in the context of the so-called pluractional stems. This has been studied intensively in Newman (1990: 118–20), who states that “the essential semantic characteristic of such verbs is almost always plurality or multiplicity of the verb’s action,” and finds that “the grammaticalization of the pluractional into a habitual aspect stem is a perfectly natural development given the intrinsic durative and repetitive meaning of pluractional verbs.” Stems of this kind are found in West, Central and East Chadic, and involve a number of morphological processes: prefixal or suffixal reduplication, internal gemination (which is perhaps reduced internal reduplication), suffixation and (more to our point) ablaut/apophony/vowel-infixation. Examples of the latter in West Chadic are these:

- Ron/Daffo: *mot/mwaát* ‘die’
- Kulere: *duk/dwáak* ‘beat’
- Angas: *cen/can* ‘cut’, *wus/was* ‘roast’, *ghən/ghan* ‘swell’

It remains very much to be determined to what extent a genetic connection can be made between this and the $V \rightarrow a$ ablaut, which can be found in certain Berber, Cushitic and Semitic present-tense stem patterns.

3.1.4 Nominal morphology

3.1.4.1 Gender-number-case affixes

Reflexes of possible cognates to Semitic feminine *-t*, plural *-u/w-Vn*, and perhaps also of nominative *-u*, accusative *-a* (Chapter 3, §3.3.2.4) can be found scattered throughout the other Afro-Asiatic languages.

Without vowels, case is difficult to detect in Egyptian, but gender-number suffixing (Table 2.11) with **-t* feminine and (presumably) **-u* plural, as can be seen in the fairly productive pattern.

Chadic does not seem to use a *-t-* for feminine noun derivation, and has other mechanisms for case-marking, but, out of a very large number of occurring plural suffixes, Zaborski (1976) points out the Chadic *-uXa* class of suffixed plurals (Newman 2000: 444–8) as possibly relevant: Hausa *kūnnē/kunnuwa*: ‘ear/ears’ (cf. also Hayward 2000: 94).

Cushitic does have a *-t(-)* suffix for derived feminines, and out of the very large inventory of possible plural suffixes in Cushitic, Zaborski (1976) has argued for the Afro-Asiatic status of some plural suffixes containing the glide *-w-* as in Hadiyya *kin-a/kin-uwwa* ‘stone/stones’. Cushitic languages moreover do have explicit case systems which, as opposed to the “unmarked-nominative” type system of Semitic (and most Indo-European), are predominantly of the “unmarked-accusative” type, with an unmarked, absolutive, form of the noun used as citation form, direct object, predicate nominal, etc., and a marked nominative case used only as subject of verbs (transitive or intransitive). The basic absolutive ~ nominative contrast in the singular is exemplified in the word-final *-V* (very frequently, but not necessarily *-a*) and the *-i/u* nominal suffixes of Oromo and Somali, and the prefixed definite article *o:- ~ u:-* of Beja (see Table 2.12).

Based on evidence of this kind, and following up on a suggestion of Hetzron (1980), Sasse (1984) has proposed case endings **-u* nominative and **-a* accusative for Proto-Cushitic, and by extension Proto-Afro-Asiatic (cf. Hayward 2000: 88–9, who

TABLE 2.11 EGYPTIAN GENDER-NUMBER SUFFIX

| | <i>M</i> | <i>F</i> |
|----|------------------------|---------------------------|
| SG | <i>sn</i> ‘brother’ | <i>sn-t</i> ‘sister’ |
| PL | <i>sn-w</i> ‘brothers’ | <i>sn-wt</i> ‘sisters’ |
| SG | <i>nṯr</i> ‘god’ | <i>nṯr-t</i> ‘goddess’ |
| PL | <i>nṯr-w</i> ‘gods’ | <i>nṯr-wt</i> ‘goddesses’ |

TABLE 2.12 CUSHITIC CASE AND GENDER

| CASE | OROMO | | SOMALI | | BEJA (<i>W. DEFINITE ARTICLE</i>) | |
|---------|-----------------|------------------|--------------|------------|-------------------------------------|--------------------|
| | ‘MAN’ | ‘GIRL’ | ‘BONE’ | ‘THIS’ | ‘CAMEL’ | ‘SHE-CAMEL’ |
| ABS/ACC | <i>nam-a</i> | <i>intal-a</i> | <i>laf-a</i> | <i>k-a</i> | <i>o:-ka:m</i> | <i>t-o:-ka:m-t</i> |
| NOM | <i>nam-(n)i</i> | <i>intal-t-i</i> | <i>laf-i</i> | <i>k-u</i> | <i>u:-ka:m</i> | <i>t-u:-ka:m-t</i> |

TABLE 2.13 BERBER GENDER-NUMBER-CASE AFFIXES

| NUM | CASE | 'CHILD' | |
|-----|----------|-----------------|-------------------|
| | | GENDER | |
| | | M | F |
| SG | absolute | <i>a-frux</i> | <i>t-a-frux-t</i> |
| | bound | <i>u-frux</i> | <i>t-frux-t</i> |
| PL | absolute | <i>i-frx-an</i> | <i>t-i-frx-in</i> |
| | bound | <i>i-frx-an</i> | <i>t-frx-in</i> |

points to some possible traces of a nominative *-*u* in Omotic, a family otherwise absent from this grammatical overview).

Finally, it is in Berber that, for large classes of nouns, we find integrated paradigms of gender-number-case marking (Table 2.13), with (-)*t*- feminine and -*Vn* plural. A typical pattern is from Tashelhiyt (Elmedlaoui 2012: 161).

Most Berber nouns, such as 'child', belong to the "affix class" (Kossmann 2012: 50), which has an obligatory (C)*V*- prefix coding gender, number and case, and a suffix marking gender and number. The case, here called "absolute" (traditionally *état libre*) functionally corresponds roughly to the Cushitic absolutive, the "bound" (traditionally *état d'annexion*) however is not only for the subjects of preceding verbs, but also after prepositions (including for possession) and numerals. The prefix coding case is overwhelmingly (-)*a*- in the absolutive singular; it can vary widely from language to language in the plural number and bound case, but tends to be in the -*i* range in the plural, and the -(*w*)*ə* ~ -*u* range in the bound.

3.1.4.2 Internal plurals

One of the earliest grammatical features proposed for Afro-Asiatic was the apophonic or infixed "internal *a*-plural" (Greenberg 1955) linking a well-known Semitic pattern (Chapter 3, §3.3.2.2) with nominal internal inflection in other branches. Plural formations of this kind are quite well developed in virtually all varieties of Berber, with patterns basically being the following:

$$(C)V(C)CV(C) \Rightarrow (C)[+\text{high}](C)Ca(C)$$

as in Figuig (Kossmann 2007: 434) (Table 2.14).

Plural patterns of this kind occur also in Cushitic (Zaborski 1986), but more sporadically: Beja (usually with short -*a*- in the plural): *ya:s/ya:s* 'dog', *bo:k/bak* 'he-goat(s)', *me:k/mak* 'donkey(s)'; Afar (usually with a long vowel in the plural): *galab/galo:b-a* 'body', *gulub/gulu:b-a* 'knee', *rigid/rigi:d-a* 'foot', *dik/di:k-a* 'family', *kut/kut-a* 'dog'. In Chadic, where we have already seen *a*-ablaut/inflection in the "pluractional" stems, there are abundant examples of noun plurals of the type: Hausa *gulbi:/gulâ:be:* 'stream(s)', *do:kii/dawa:ki:* 'horse(s)'; Mubi *irin/aràn* 'eye', *lè:si/lâàsâ* 'tongue(s)'. Note however

TABLE 2.14 BERBER INTERNAL A-PLURAL

| <i>sg</i> | <i>pl</i> | <i>GLOSS</i> |
|-------------------|------------------|--------------|
| <i>a-γənsu</i> | <i>i-γənsa</i> | 'face' |
| <i>a-jəlzim</i> | <i>i-jəlzam</i> | 'hoe' |
| <i>a-məzwar</i> | <i>i-məzwar</i> | 'first' |
| <i>t-γardəm-t</i> | <i>ti-γurdam</i> | 'scorpion' |

Newman's suggestion for Hausa (and Mukulu) that these might be really instances of a plural suffix *-aCi* "in which the C slot is being filled by the third consonant of the root" (1990: 41). In our context we might do well to note also two conclusions that he makes concerning plural nouns and pluractional verbs (1990: 134):

- (f) Even though internal-a noun plurals are widely found in Chadic, the evidence for reconstructing them back to the P[roto]C[hadic] level is weak.
- (f') If P[roto-]C[hadic] did not have internal-a plurals, what explains their presence throughout the family? Can one speak sensibly of an Afroasiatic 'drift' that predisposes individual Chadic languages to employ vocalic mutation or infixation for grammatical or morphological purposes?

3.2 Lexical cognates

Potential Afro-Asiatic cognate sets are not hard to come by. Of the two most recent collections, Ehret (1995) has 1,024, and Orel and Stolbova (1995) have 2,672. The problem is the interpretation and evaluation of phonetic and semantic resemblances over languages, on the one hand, separated by many millennia of linguistic development, and, on the other, with many points of both attested and possible pair-wise contact. Ratcliffe (2012) has given a good overview of the problems involved in these undertakings. It is of course possible to establish a certain number of interlocking sound-correspondences and phonetic transformations of the sort familiar from other areas of historical linguistics, and with further work on the reconstruction of the individual branches more will undoubtedly emerge – but we still need to work out more principled explanations about the mechanisms by which, after many millennia of separation, such a large proportion of the convincing cognates seem to show virtually identical consonantal correspondences, along with a nearly equal proportion of seemingly random vowel correspondences. Analogical restoration after phonetic drift under the strong morphology-driven tendency toward fashioning vocabulary on a set of CV templates (such as those briefly illustrated above in connection with verb stem formation in Tables 2.8, 2.9 and 2.10) is undoubtedly part of the answer. We are far from the detailed explanation we would like, which however does not seem unattainable.

This said, among the large number of proposed Afro-Asiatic cognates sets, it is not hard to draw up, as Hayward (2000: 94) suggests, a short selection which "seem unlikely to be disputed." A portion of Hayward's selection, with a sample of data, are found in Table 2.15.

| SOURCE | *GLOSS | SEMITIC | EGYPTIAN | BERBER | CUSHITIC | CHADIC | OMOTIC |
|------------------------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| O&S 194 Ehret 265 | *bak- 'strike, squeeze' | *bak- 'squeeze, tear' Arabic <i>bkk</i> *dam 'blood' Akkadian <i>damm</i> | <i>bk</i> 'kill (with a sword)' (cf. <i>ydm</i> 'red linen') | *b/k- 'strike, pound' Tuareg <i>bakkat</i> *dam 'blood' Ghadames <i>damm-ən</i> | *bak- Afar <i>bak</i> (cf. *dim 'red' Oromo <i>di:ma:</i> 'red') | *bak- 'strike, beat' Wandalaß <i>bak</i> *dam- 'blood' Bolewa <i>dom</i> | Gamo <i>bak-</i> 'strike' (RH) *dam- 'blood' Kaffa <i>damo:</i> 'blood' Aari <i>zom?i</i> 'blood' (RH) |
| O&S 867, Ehret 265 | *gad- 'beat, squeeze, old, elder' | *gad- 'be, considerable' Arabic <i>gadd-</i> Arabic <i>gadd-</i> 'grandfather, ancestor' (cf. *gʕʕj- 'shout' Hebrew <i>gʕj</i>) | <i>ghy</i> 'call, say' | | *gad- 'age group, generation' Oromo <i>gada:</i> Buri <i>gad-awwa</i> 'old man' | *gad- 'old' Ngizim <i>gad e</i> | |
| O&S 911, Ehret 274 | *gaj- 'say' | | | | | | *gaj- 'say' Sheko <i>ge</i> Aari <i>gai-</i> (cf. Yemsa <i>fill-</i> 'jump' Dime <i>far-</i>) |
| O&S 1981, Ehret 51 | *pir 'fly, soar' | *pir- 'fly, flee' Ugaritic <i>pr</i> Arabic <i>fr</i> | <i>pry</i> 'soar, rise' | *fr- 'fly' Alogar <i>farə-t</i> | Beja <i>fir</i> 'fly' Agaw *fir- 'fly' | West *ga(i)- Hausa <i>gaja</i> | West *pir- 'soar' Hausa <i>fi:ra</i> Central *pfr- 'bird's flight' Mafa <i>parr</i> , <i>perr</i> West *sumi- 'name' Hausa <i>su:na:</i> Sura <i>sum</i> East *him(ja)- 'name' Ga'anda <i>him</i> *tuf- 'spit' Hausa <i>to:fa:</i> Mubi <i>tuffa</i> |
| O&S 2304, Ehret 220 | *sum- 'name' | *jim- 'name' Akkadian <i>šumu</i> | | | | | |
| O&S 2413, Ehret 162 | *-tuf- 'spit' | *tup- 'spit' Aramaic <i>tp</i> Arabic <i>tff</i> | <i>tf</i> 'spit' (C. <i>taf</i>) | | *tuf/tif 'spit' Beja <i>tuf</i> Kemant <i>taffj-</i> Somali <i>tuf</i> | | |

Notes: O & S = Orel and Stolbova (1995); Ehret = Ehret (1995); RH = Hayward (2000).

4 SEMITIC AS AN AFRO-ASIATIC LANGUAGE FAMILY

Given the evidence just been reviewed, plus the additional material that could easily be added, it seems clear that an Afro-Asiatic “super-family” exists, and that the Semitic language family is Afro-Asiatic. The question now becomes this: what exactly are we to understand by “Afro-Asiatic”?

As far as a period of Afro-Asiatic unity is concerned, a lowest *terminus ante quem* of course is given by the historically attested earliest distribution of Semitic and Egyptian in the fourth millennium BCE. Preceding this however must have been a very long period during which the languages differentiated, peoples moved and the agricultural/animal husbandry technology associated with them diffused. As for place, it has been common to argue for an African center for Afro-Asiatic dispersal/diffusion, given the enormous differentiation of Afro-Asiatic families in Africa, as opposed to the comparative uniformity of Semitic, and the apparent relatively late arrival of Semitic in southern Mesopotamia. A shift of the African center of Afro-Asiatic toward the eastern edge of the continent, for example the Egyptian Eastern Desert, as Diakonoff (1998) suggests, might correlate with the “Macro-Cushitic” scenario we are about to review. We might note also that Militarev (2002), based on an analysis of Afro-Asiatic agricultural vocabulary, would shift the “homeland” even more to the northeast, to the Natufian Levant. For time and place together, note Hassan (2002), and especially the conclusions of Bar-Yosef (2002), according to which early Neolithic agricultural economy would have dispersed from the northern “core areas” through the Natufian Levant and into northeast Africa around 9000 BCE. According to the one scenario or the other reviewed earlier, Afro-Asiatic peoples thus could plausibly have been either the bearers of this dispersal into Africa, or its first African recipients.

Various attempts have been made, based on various types of evidence, to detect sub-grouping in the originally proposed five (later six) coordinate branches. On the basis mainly of grammatical evidence, more recently, it has often been suggested that the earliest groups to “leave” common Afro-Asiatic were Omotic (perhaps first?) and Chadic. It has been noted also in a number of discussions that there is a clear primary sharing of morphological features, especially the prefix conjugation, among Semitic, Cushitic and Berber (a group designated by Bender 1997, in an unusually refreshing replacement of Semitic linguistic hegemony by another, as “Macro-Cushitic”), and then of other features with Egyptian. If the prefix conjugation is a shared innovation, and not participated in by Egyptian, that would give a tree with the node consisting of the “Macro-Cushitic” node plus an Egyptian node as coordinate, with independent Omotic and Chadic nodes. But we certainly need to know a lot more about Omotic, descriptively and comparatively, before we can decide more surely what features of Omotic might be evidence of primitive “otherness,” and what might be evidence of more recent intensive Nilotic contact. We also need more evidence, and better criteria, for being able to determine which putative diagnostic features, such as the prefix conjugation, are in fact shared innovations, as opposed to inherited archaisms, yielding classic coherent isoglosses (as required in Hetzron 1976), and which features might be instances of dialectal variation in Afro-Asiatic yielding cross-cutting isoglosses (as envisioned also by Hetzron 1990).

In short, much research, archeological and linguistic, stands between us and any certainty about what exactly we are to understand by “Afro-Asiatic” – what linguistic substance is to be given to the term, and how the Afro-Asiatic language situation, including its genesis, is to be modeled.

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